# TEXAS DEPARTMENT OF INSURANCE

Engineering Services Program / MC 103-3A 333 Guadalupe Street P.O. Box 149104 Austin, Texas 78714-9104 Phone No. (512) 322-2212 Fax No. (512) 463-6693

### PRODUCT EVALUATION

RC-341

Effective August 1, 2012

The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code** (**IRC**) and the **International Building Code** (**IBC**). This product shall be subject to reevaluation in **March 2014**.

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

SWP-12 Metal Panels Installed Over Steel Purlins/Girts, manufactured by

ACI Building Systems 10125 Highway 6 West Batesville, Mississippi 38606 Telephone: (662) 563-4574 www.acibuildingsystems.com

will be accepted for use in areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

#### PRODUCT DESCRIPTION

This evaluation report is for SWP-12 metal panels installed over steel purlins. The metal panels are 24 gauge Galvalume coated steel. The metal panels have 12 inches of coverage. The metal panels have a 1" height. The metal panels conform to ASTM A792, SS Grade 50 Class 1, with a minimum yield strength of 50 ksi. The metal panels can be furnished painted over an AZ 50 hot-dipped aluminum zinc alloy coating or an acrylic-coated Galvalume steel with an AZ 55 hot-dipped aluminum zinc alloy coating. The metal panels can be painted with silicone polyester products or with Kynar paint systems.

#### LIMITATIONS

**Framing:** The metal panels shall be installed over open steel purlins/girts using No. 10-16 x1" long self-drilling, self-tapping, pancake head steel screws or  $\frac{1}{4}$ -14 x 1" long self-drilling, self-tapping, pancake head steel screws.

**New Framing Attachment:** The framing shall meet or exceed the wind pressure requirements of the International Residential Code or International Building Code and shall be installed as required for resistance to wind loads.

**Design Wind Pressures:** The design pressure negative wind load resistance shall be as specified in Table 1.

Installation Over an Existing Roof Covering: Not permitted.

Table 1

Span of 12" 24 Ga. SWP-12 Panels Attached to minimum 16 Ga. purlins/girts	Design Load (psf)
1'-0" o.c.	-75
1'-6" o.c.	-70.63
2'-0" o.c.	-66.25
2'-6" o.c.	-61.88
3'-0" o.c.	-57.50
3'-6" o.c.	-53.13
4'-0" o.c.	-48.75
4'-6" o.c.	-44.38
5'-0" o.c.	-40

## **INSTALLATION INSTRUCTIONS**

**General:** The metal panels shall be installed in accordance with the manufacturer's recommended installation instructions and this evaluation report.

**Steel Purlins:** The minimum thickness of steel and the maximum spacing of the purlins shall be as specified in Table 1.

Underlayment: N/A.

Attachment of Metal Panels to the Steel purlins/girt: For panel-to-purlin/girt attachment, one (1) No. 10-16 x 1" long self-drilling, self-tapping, pancake head steel screw or one (1)  $\frac{1}{4}$ -14 x 1" long self-drilling, self-tapping, pancake head steel screw shall be provided at each structural member. Refer to Figure 1.

**Panel Side Laps:** Ribs to be stitched together with  $\frac{1}{4}$  -14 x  $\frac{7}{8}$ " long Lap Tek self drilling screws located at 24 inches on center.

Panel Edges to the Steel Purlins/Girt: For panel-to-purlin/girt attachment, one (1) No. 10-16 x1" long self-drilling, self-tapping, pancake head steel screw or one (1)  $\frac{1}{4}$ -14 x 1" long self-drilling, self-tapping, pancake head steel screw shall be provided at each purlin/girt. Refer to Figure 1.

**Trims, Closures, and Accessories:** Components, such as head, jamb, and angle trim shall be installed as required by the manufacturer.

**Note:** The manufacturer's installation instructions shall be available on the job site during the installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.

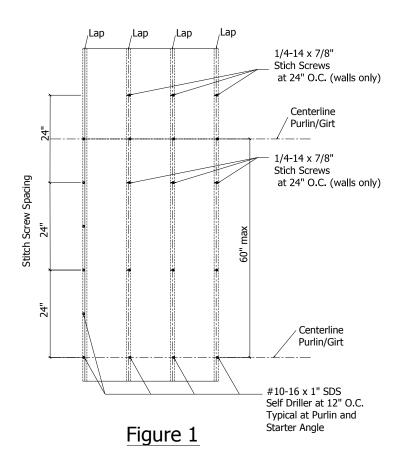


Figure 1. Screw Layout for SWP-12 Panels

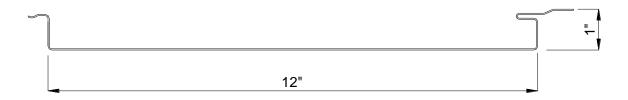


Figure 2. SWP-12 Panel Profile